

Abstract of the Disclosure

5 Variants of homodimer-forming chemokines, such as human CCL2, having a single amino acid substitution in the dimerization interface that alters the pattern of hydrogen bonds and acting as an obligate monomer, can antagonize natural chemokines and have anti-inflammatory activity *in vivo*. These variants can be used as active ingredient in pharmaceutical compositions for the treatment of inflammatory, autoimmune, or infectious diseases.